UNTIED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:

Fowler, et al.

GROUP ART UNIT: 3618

SERIAL NO.:

09/833,165

EXAMINER: Addison, Karin B.

FILED:

April 11, 2001

FOR:

SOLID BODY INDUCTION MOTOR FOR VEHICLE APPLICATIONS

ATTORNEY DOCKET NO.: 60,130-788

Assistant Commissioner of Patents Washington, D.C. 20231

REQUEST FOR RECONSIDERATION

FAX RECEIVED

AUG 1 1 2003

Dear Sir:

In response to the Official Action of June 13, 2003, Applicant requests consideration OUP 3600 the following arguments.

First, the examiner's disposition of the claims is incorrect. The examiner states that claims 1-5 and 7-25 are pending in the application. In the Official Action of September 6, 2002, the examiner required Applicant to elect between the apparatus claims 1-11 and the method claims 12-15. Applicant elected the apparatus claims 1-11. In the Official Action of November 4, 2002, the examiner acknowledged Applicant's election. Thus, method claims 12-15 have been withdrawn from consideration. Further, the examiner has ignored claim 6, which remains pending in the application.

The proper disposition of claims is as follows. Claims 1-11 and 16-25 remain in the application including independent claims 1, 7, and 18. Method claims 12-15 have been withdrawn from consideration. Applicant respectfully requests that the examiner correct the record to show the proper disposition of claims. Further, as claim 6 does not currently stand

rejected under any prior art, Applicant assumes claim 6 is allowable and requests an indication of such.

Second, the examiner has prematurely issued a final action. The examiner argues, "Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action." The only amendments made to the claims in Applicant's response to the previous Official Action of November 4, 2002 were to address 35 U.S.C. 112, second paragraph, rejections. No substantive amendments were made to any of the claims in response to the prior art rejections, thus there has been no amendment made by Applicant that would necessitate the new ground of rejection.

Further, the issues between examiner and Applicant have not been fully developed such that a final rejection is proper.

Before final rejection is in order a clear issue should be developed between the examiner and applicant. To bring the prosecution to as speedy conclusion as possible and at the same time to deal justly by both the applicant and the public, the invention as disclosed and claimed should be thoroughly searched in the first action and the references fully applied; and in reply to this action the applicant should amend with a view to avoiding all the grounds of rejection and objection. Switching from one subject matter to another in the claims presented by the applicant in successive amendments, or from one set of references to another by the examiner in rejecting successive actions claims of essentially the same subject matter, will alike tend to defeat attaining the goal of reaching a clearly defined issue for an early termination, i.e., either an allowance of the application or a final rejection. See MPEP 706.07.

No substantive amendments were made to the claims, thus Applicant did not switch from one subject matter to another in the claims. Further, the examiner did not even apply the same prior art rejection to the claims that was used in the previous office action. The examiner conducted a new search, and applied a new set of references and rejections to the same claims.

Thus, the examiner switched from one set of references to another set of references in successive actions for claims that were essentially the same subject matter. This defeats the goal of reaching a clearly defined issue for early termination and indicates that the issuance of the final rejection was premature. Applicant asserts that the issuance of a Final Action was premature and respectfully requests that it be withdrawn.

Even if the final rejection is deemed proper, the claims are still allowable over the examiner's new rejections and references. Claims 1-5 stand rejected under 35 U.S.C. 102(b) as being anticipated by Horski. Claim 1 is directed to a motor having a stator body and a rotor body where at least one of the stator and rotor bodies are formed of a generally solid core of a first material and having a plurality of circumferentially spaced portions of a second material at an outer peripheral surface of the core with the second material comprising a conductive material deposited into the portions wherein the second material is more conductive than the first material.

The examiner argues that Horski shows a motor with a stator body having a solid core 38 formed of a first material with a plurality of circumferentially spaced portions 40 having a second material consisting of plastic at an outer peripheral surface with a conductive material being deposited between the teeth 36 over the insulating that's more conductive than the first material. Applicant disagrees.

Horski does not teach the use of a stator body having a solid core. The stator assembly 32 in Horski is "of the divisible core type." See column 3, line 1. The stator is formed from a plurality of individual core members 38 that are spaced apart from each other by gaps 44. Thus,

examiner's interpretation of the Horski stator as being a solid core directly contradicts the teachings of Horski.

Further, the stator body in Horski does not include a plurality of circumferentially spaced portions. What the examiner argues are the circumferentially spaced portions, i.e., component 40, is actually a single-piece connecting ring that is attached to each of the individual core members 38. Also, claim 1 requires the circumferentially spaced portions to be at an outer peripheral surface of the solid core. It is clear from Figure 3 of Horski that the connecting ring 40 is positioned at an inner peripheral surface of the individual core elements 38, and not an outer peripheral surface as claimed by Applicant.

Finally, the examiner argues that the connecting ring 40 is made from a plastic material that is more conductive than the plastic material that forms the core elements 38, but relies on a component that is completely separate from the connecting ring 40 to meet the claimed limitation. The examiner argues, "a conductive material is deposited between the teeth (36) over the insulating layer that's more conductive than the first material." This argument has nothing to do with the claimed features set forth in claim 1.

First, component 36 in Horski is not "teeth" but is instead the windings that are wound around the core elements 38. Second, claim 1 requires the circumferentially spaced portions to be formed of a second material that is more conductive than the first material that forms the core. The examiner argues that connecting ring 40 in Horski is equivalent to the circumferentially spaced portions set forth in claim 1. The connecting ring is made of an insulating material and is preferably plastic. See column 3, lines 14-15 and 23-25. An insulating material is not conductive and thus cannot be more conductive than the core material, which is conductive.

Thus, for the several reasons set forth above, Horski clearly does not anticipate claim 1 and the 35 U.S.C. 102(b) rejection must be withdrawn.

Claims 7-25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Horski in view of Hull. Claim 7 is directed to a vehicle component drive assembly having a vehicle component movable between a plurality of operational positions relative to a fixed vehicle component and an AC motor for driving the component wherein the AC motor includes a rotor and a stator, with at least one of the rotor and the stator having a core body formed of a first material and a plurality of circumferentially spaced conductive areas formed of a second material that is more conductive than the first material.

For the reasons set forth above, the stator of Horski does not have a core body having a plurality of circumferentially spaced areas formed of a material that is more conductive than the core body material. Hull also does not disclose, suggest, or teach this feature.

Further, claim 7 requires an AC motor to drive the vehicle component. Horski clearly discloses the use of a DC motor, not an AC motor. See column 2, lines 51-53. Hull also does not teach the use of an AC motor. The examiner argues that Hull teaches the use of an AC motor for driving a vehicle component, however, there is no mention of an AC motor in Hull. Applicant respectfully requests that the examiner indicate how Hull teaches the use of an AC motor having the claimed structure set forth in claim 7.

Finally, there is no motivation or suggestion to modify Horski with the teachings of Hull. The examiner argues that it would be obvious "to modify the electric motor of Horski with the teaching of Hull electric motor for the purpose of utilizing a different locking technique which allows the use of a smaller motor and no gear box to achieve the same useful results as a worm

wheel drive system at considerably less cost." This argument has no relevance to claim 7 and further is nonsensical in light of the teachings of the references.

Horski teaches the use of a DC water pump-motor that is specially designed to have a divided core that is configured to isolate the windings from cooling fluid flowing through the motor. Hull teaches the use of an electric motor having a specially designed braking and locking mechanism for preventing movement of a closure member under predetermined conditions. These motor applications are very different from one another. There would be absolutely no motivation to modify the DC water pump-motor of Horski with motor teachings of Hull to achieve the invention set forth in claim 7.

Further, the examiner seems to be arguing that it would be obvious to modify the Horski motor with the locking mechanism of Hull. This has nothing to do with Applicant's claims. Applicant is not claiming a locking device. Further, water pump-motors do not need a braking or locking mechanism. Thus, there would be no benefit to modify Horski to include the Hull locking mechanism.

Even assuming, arguendo, that Horski could be modified with the teachings of Hull, the only modification that might make sense would be to use the electric motor of Hull in place of the electric motor of Horski. However, this modification would clearly defeat the benefits achieved by the Horski motor with regard to the specific cooling structure. Such a modification would render Horski unsatisfactory for Horski's intended purpose and would change the principle of operation of Horski. The examiner's proposed modification cannot render the prior art unsatisfactory for its intended purpose and cannot change the principle of operation of the base reference. See MPEP 2143.01.

Further, the Hull motor clearly does not have the rotor and stator structure that is set forth in claim 7. The examiner has pointed to no teaching in Hull of any particular benefit to using the Hull motor in place of the Horski motor. In addition, there is nothing in Horski that would have led one of ordinary skill in the art to believe that Horski's motor was in any way deficient for Horski's purposes or was in need of modification, especially as the Horski motor was specifically designed to achieve a beneficial cooling structure.

For similar reasons to those set forth above, independent claim 18 is also allowable over the combination of Horski and Hull. Further, none of the dependent claims are anticipated by Horski or rendered obvious by the combination of Horski and Hull. As an example, claim 23 requires both the rotor and the stator to include a core body portion formed of the first material and the plurality of circumferentially spaced portions formed of the second material. This clearly is not taught by either reference.

Applicant asserts that all claims are in condition for allowance and respectfully requests an indication of such. Applicant believes that no additional fees are due, however, the Commissioner is authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds for any additional fees.

Respectfully submitted,

FAX RECEIVED

AUG 1 1 2003

Kerrie A. Laba, Reg. No. 42,777

Carlson, Gaskey & Olds

400 W. Maple Road, Ste. 350 Birmingham, MI 48009

(248) 988-8360

Dated: August \$2,2003GROUP 3600

CERTIFICATE OF TRANSMISSION UNDER 37 CFR 1.8

I hereby certify that this correspondence is being facsimile transmitted to the United States patent and Trademark Office, fax number (703) 872-9319, on August _______, 2003.

Laura Combs

N:\Ctients\MERITOR\Ip00788\PATENT\Request For Reconsideration.doc

FAX RECEIVED

AUG 1 1 2003

GROUP 3600

Official